



Hurricane Irma/Hurricane Maria 2017

10/12/2017 – 1030 EDT Update

New or Updated Information is Highlighted in this Report

EXECUTIVE SUMMARY

- The humanitarian crisis – particularly in Puerto Rico – is severe. Residents in more remote areas are still lacking food, water and medicine. Distribution of these supplies has improved as roads have been cleared, but remains a major difficulty.
- There are reports that the incidence of diseases is increasing, including gastrointestinal problems and conjunctivitis, leptospirosis and other vector-borne diseases.
- Many buildings on the several islands of PR and the USVI sustained serious damage; on St. John, USVI, over 80% of buildings were heavily damaged.
- Power remains out for 85% or more of the residents of PR and USVI. The USVI anticipates restoration of power to 90% of clients by the end of the calendar year; in PR restoration will take months longer. Many office and commercial buildings have generators, as do many private residences; but access to fuel remains difficult. There are reports of thefts of fuel and even generators.
- Drinking water systems have been compromised on all the islands – particularly distribution of finished water. Much of the distribution network relies on electric-powered pump stations and is thus affected by the power outages and lack of fuel for generators. In PR, over 35% of the population is still not receiving drinking water through the utility system; comparable data for the USVI is not available.
- PR sewage systems were damaged; over 40% of the sewage treatment plants are not operational because of damage to the plants themselves, damage to the trunk lines that bring the sewage to the plants, and/or damage to or lack of electric power at pump stations. Raw sewage discharges are ubiquitous; some discharges enter waterways upstream of drinking water intakes. Residents are using surface waters (rivers, streams, lakes, coastal waters) for washing, potentially exposing them to harmful pathogens from the sewage discharges. EPA, CDC and PR DOH are advising residents not to bathe in surface waters. In the USVI, damage to sewage systems was less severe, but plants do not have primary power, and lack sufficient generators or generator fuel.
- Waste management is a major concern. A large amount of storm-damaged debris is accumulating across all the islands. Debris lines many roads. In PR, there are

reports of unauthorized, clandestine dumps being created in many places.

- Overall command of the federal response is now with the military (Generals Richard Kim & Jeffrey Buchanan). The Army Corps of Engineers (USACE) has been assigned the task of assisting PREPA to rebuild Puerto Rico's infrastructure.
- EPA's major missions on the islands include: assessment of drinking water and sewage systems; oil and chemical spill response; oil and chemical facility assessments; and debris management (particularly hazardous materials, and oversight of possible mass burning of debris). EPA works closely with FEMA, USACE, US Coast Guard (USCG), and other federal and local government authorities.
- Region 2's CEPD Guaynabo office officially opened on 10/2. Nearly all personnel stationed in the Caribbean have been able to report to work. At times the building is running on power from the utility, but that service occasionally still fails and then generator power is activated. Data and voice services and cell phone service is operating. The CEPD offices in Vieques, PR and St. Thomas, USVI, sustained some minimal damage, and have limited power and water service; these offices remain officially closed until further notice.
- EPA currently has approximately 147 personnel (employees and contractors) in PR and the USVI working on the response. This number includes some CEPD staff who are participating in the response. We plan for that number to increase significantly to over 200 before the end of October, and to about 400 by early December. To date, however, it has been extremely challenging for EPA to move response personnel and equipment to the islands. Access to seats on flights has improved but securing lodging on the islands remains difficult. EPA continues to pursue berthing space on the various FEMA-supported vessels arriving in PR and the USVI.
- Official Commonwealth and Territorial Requests for Assistance
 - Puerto Rico Requests
 - On 9/9 requested to assess oil & hazmat releases, contaminated debris & other environmental events in PR.
 - On 9/28 requested removal, cleanup and disposal of oil & hazmat; collect and dispose of HHW; monitor immediate threats to public H&S and the environment in PR
 - On 9/30 requested to coordinate/execute all necessary assessments, evaluations, sampling and analytical services/support to ensure the safety and quality of drinking water & wastewater.
 - USVI Requests

- On 9/7 requested to assess oil & hazmat releases, contaminated debris & other environmental events in the VI.
- On 9/13 requested removal, cleanup and disposal of oil & hazmat; collect and dispose of HHW; monitor immediate threats to public H&S and the environment in the VI.
- EPA has been requested by DPNR/VITEMA and FEMA to add collection and disposal of medical waste as part of our hazardous waste mission. EPA is drafting a Mission Assignment Task Order (MATO) to task this medical waste mission under our existing direct assistance MA.
- On 10/6 Dawn Henry, Director of the USVI DPNR, wrote to R2 requesting assignment of a variety of human resources to assist DPNR; these include an attorney, public affairs specialist, children's health specialist, solid & hazardous wastes specialist, and oil specialist. R2 will evaluate and respond to the request.
- Other Significant Upcoming Events.
 - New York City Marathon, 11/5/17, New York, NY
 - Macy's Thanksgiving Day Parade, 11/24-25/17, New York, NY

PUERTO RICO / U.S. VIRGIN ISLANDS CONDITIONS

US Virgin Islands (USVI):

- State of Emergency declared; National Guard activated.
- **Curfew.** Curfew in place from 8:00 p.m. to 5:00 a.m. in St. Thomas, St. John, and Water Island. St. Croix curfew in place from 8:00 p.m. to 9:00 a.m.
- **Power:**
 - St. Thomas 14.4% are receiving power from the grid
 - St. John: 0% No grid power
 - St. Croix 12% are receiving power from the grid
 - 90% of the USVI to be restored by late December.
- **Cellular Coverage.** USVI: 45% cell sites are operational; St. Thomas: 50% cell sites operational; St. John: No cell sites operational; St. Croix: 48% cell sites operational. St. John being serviced by temporary Wi-Fi hot spots and personal MiFi devices.
- **Airports:** St. Thomas and St. Croix: Open and receiving commercial aircraft.

- **Ports:** Six ports open and three ports opened with restrictions. Passenger ferry service available from St. John to Red Hook (7:00 a.m. to 5:30 p.m.)

Puerto Rico (PR):

- **General.**
 - US House of Representatives Speaker Paul Ryan is traveling to Puerto Rico with Resident Commissioner Jennifer Gonzalez and members of the House of Representatives' Appropriations Committee on Friday, October 13.
 - US House of Representatives will vote on resolution that currently allocates \$35 billion for FEMA's emergency response funds in areas affected by natural disasters. This resolution highlights Puerto Rico's lack of liquidity. According to Resident Commissioner Jennifer Gonzalez, approximately \$13.7 billion could be assigned to Puerto Rico. Resolution also calls for the US Armed Forces to sustain emergency response and recovery operations in Puerto Rico and the USVI.
 - President Trump also proposed a \$4.9 billion loan to Puerto Rico and the USVI under FEMA's community disaster loan program. The Governor of Puerto Rico has indicated that this \$4.9 billion loan will help Puerto Rico's government sustain operations until the end of December.
 - PRASA, the PR water utility, estimates \$91.3 million in repair needs just for the 20%-25% of its system that has been assessed to date.
 - Governor Ricardo Rosselló requested \$4.6 billion in an initial aid request to the US Congress as part of Hurricane María's recovery efforts. Governor indicates that hurricane damages are estimated up to \$90 billion.
- **PREPA** – PREPA reports that **89.4%** of their clients are without service. Percentage went up again from 85% to 89.4% because the San Juan Power Plant collapsed and is currently in reparation. Sectors from the following municipalities have been energized: Mayaguez, Hatillo, Ponce, Arecibo, Carolina, Santa Isabel, and San Juan.
- **PRASA** – PRASA reports that **36%** of clients are without drinking water service. The La Plata Dam was reenergized and will be able to supply additional drinking water to 140,000 clients in the Metropolitan Area, including municipalities in Bayamon, Toa Baja, and Toa Alta.
- **Telecommunications** – Telecommunications Board reports that **46%** of telecommunications service is still disrupted.
- **Solid Waste Management** – Municipalities continue to report that large amounts of clandestine dumps have been established in their communities. They are concerned with public health and environmental impacts.

- **Fuel Supply** – 22% of gasoline stations are not operational. 860 of 1,100 gas stations are currently operational.
- **Airports** – Luis Munoz Marin International Airport has completely reestablished operations. Currently managing **50** flights per day. Airport had to partially close yesterday because of power outage and problems with the airport's radar. All airports are open.
- **Ports** – Six ports open and seven ports open with restrictions. Ferries resuming service with limited schedules.
- **Hospitals** – 43 hospitals have been energized. 72 hospitals are receiving assistance and support in diesel distribution and generator maintenance. Medical Super Shelters (with capacity for 250 patients) have been established in five locations in Puerto Rico. USNS Comfort (with capacity for 1,000 patients) was transferred to the western part of the island to support medical needs and attend medical patients referred by the PR Department of Health in this region. It will make stops in Arecibo-Manati, Aguadilla, Mayaguez, Yauco-San German, and Ponce.
- **Curfew** – Curfew hours in Puerto Rico are from 12:00 am to 5:00 am.
- **Shelters** – 5,742 residents currently living on government shelters.
- **Disease Outbreaks** – Disease outbreaks have been reported in numerous municipalities (diarrhea, conjunctivitis, etc.). Department of Health confirmed 10 active cases of leptospirosis and the death of two persons due to the disease. EPA also received from HHS an unconfirmed report from a citizen indicating potential malaria and conjunctivitis cases in Villalba, Juana Diaz, and vicinity.
- **Socioeconomic Issues** – Many inland municipalities continue to claim that aid is not reaching their communities, particularly food and water.

PUBLIC AFFAIRS

The PIO is Janie Acevedo, who can be reached at 469-222-7810. The Assistant PIO for Community Relations is Pat Seppi, who can be reached at 646-369-0068. The Assistant PIO for Media Relations is Rusty Harris-Bishop, who can be reached at 415-694-8840. All press inquiries are being managed through the Office of Public Affairs. Elias Rodriguez is serving as the Field PIO in San Juan and is working the EPA desk at the Sheraton Convention Center with FEMA. Elias will provide on-the-ground support for the R2 RA/DRA visit to Puerto Rico 10/16- 10/18. Elias can be reached at 732-672-5520, but email is more effective due to poor cell service. Wanda Calderon is staffing the ESF #10 desk, supporting REOC and Field PIO functions and can be reached by email.

A DVIDS video "Community Water Assessment Mission" is now posted on <https://www.dvidshub.net/video/557337/community-water-assessment-mission>. The REOC and

Field PIOs are working with reporters from the Associated Press and El Nuevo Dia to do stories on EPA's work on wastewater and drinking water facility assessments, respectively. A Maria update news release was issued on October 11, 2017 "[EPA Hurricane Maria Update for Wednesday, October 11th](#)". The news release was translated into [Spanish](#) and posted to the Web. The news release generated a lot of media interest in our statement that people are drinking, or may be attempting to drink, water from Superfund sites in Puerto Rico. We are working closely with Operations, the Regional Administrator and the Regional Incident Commander to provide an update on October 12 to the media and the public on steps that the EPA and FEMA are, and will be, taking to address the issue. We continue to provide all Region 2 staff with relevant Maria news clips and EPA news releases. News releases are being translated to Spanish and posted and distributed widely by the PIO.

The response web site www.epa.gov/hurricane-maria is being updated daily by the Region 2 PIO and Assistant PIO for Media.

Community Involvement: Bi-lingual Community Involvement Coordinators (CICs) are assisting the assessment teams in Puerto Rico. Natalie Loney is serving as a CIC in St. Thomas and will be supporting the R2 RA/DRA visit to the USVI on 10/19. To guide our outreach efforts in Puerto Rico and the USVI, a Hurricane Maria Community Outreach Plan has been developed.

OBJECTIVES

Region 2 – Hurricane Maria Management Objectives

- Protect the health and safety of EPA employees.
- Implement the mobilization plan to move needed personnel and equipment to the islands.
- Minimize social, political, and economic adverse impacts.
- Maintain communication and briefing schedule with R2 senior executives and EPA Headquarters. Support a consistent communications approach agency-wide, enabling EPA to act and speak in unison during these incidents.
- Provide situation reports and other information on schedule provided by RIC.
- Provide guidance for length of work day and deployments as it pertains to this specific event.
- Coordinate logistics with deployed personnel to provide transportation options, lodging, security, ground transportation on site.
- Identify clearly defined roles for both Regions and Headquarters.
- Identify long-term recovery objectives the Agency may be requested to support, and determine resources needed to support/sustain those requests to accomplish the objectives.
- Secure NPL and removal sites. Regulated facilities and Superfund and oil sites will be surveyed post storm fall.
- Identify vulnerabilities at regulated facilities.
- Address any immediate hazardous substance releases or oil spills resulting from the storm's impact.
- Assist state and local agencies in ensuring safety of drinking water systems.

- Coordinate with the USACE and FEMA to assist state and local agencies to repair drinking water infrastructure.
- Assist federal, state and local agencies to assess and identify needed repairs to wastewater conveyance and treatment systems.
- Assist federal, state and local agencies in management of debris, including in particular hazardous materials, electronic waste, medical waste, refrigerants, white goods, and oil and chemical wastes; provide guidance and oversight if/when thermal reduction (burning) of wastes is carried out.
- Monitor air quality when/if necessary in response to conditions on the ground.
- Coordinate national resources to assist the Region.
- The response will use the Region's incident specific Data Management Plan (DMP).
- In collecting, sharing, and analyzing environmental data, EPA will give primacy to data with potential human health consequences.
- EPA will work to ensure that its decision-makers have access to the data and expertise they need to make decisions based on sound science.

Region 2 - Hurricane Maria Incident Objectives

- The health and safety of our responders is our highest priority. Develop health and safety messages daily for all field operations;
- Ensure health and safety of the public by conducting environmental assessments and operating in accordance with approved site safety plans;
- Coordinate deployments and field activities with community involvement coordinator and Assistant Safety Officers;
- Continue coordination with OSC deployed to the NRCC in Washington DC on logistics and FEMA Mission Assignments;
- Continue coordination with OSCs deployed at the FEMA Interim Operating Facility in San Juan, PR;
- Coordinate and prioritize the assessment of Hazardous Material and Oil Response sites in Puerto Rico and USVI;
- Coordinate with CEPD, prioritize and perform drinking water and waste water assessment targets in Puerto Rico and the USVI;
- Coordinate, prioritize and perform fixed facility assessments of RMP, FRP and SPCC facilities in Puerto Rico;
- Perform preparation activities for upcoming field deployment of clean-up resources for abandoned containers, household hazardous waste, hazardous debris and hazardous material staging areas in Puerto Rico and USVI;
- Coordinate all field activities with CEPD program office staff and FEMA division coordinators. Support CEPD operations that are within the scope of the FEMA Mission Assignments;
- Support USCG sunken vessel recovery operations and coordinate operations with ESF10 partner USCG;
- Continue drinking water sampling and facility assessments as coordinated and prioritized with DPRN;
- Develop and implement a full staffing plan to increase the response effort to meet the FEMA mission assignments and then for continuous operation Puerto Rico, USVI and in the REOC.

DEBRIS RECOVERY

Puerto Rico Debris Mission

- **Debris Management:**
 - EPA is currently coordinating with the US Army Corp of Engineers in support of EPA's hazardous materials removal operations Mission Assignment. USACE is currently evaluating several locations for debris collection staging areas (see table below). EPA plans to co-locate hazardous material staging areas at all identified staging locations. Until USACE's areas are identified, EPA is coordinating with EQB to establish a temporary hazardous materials staging area.
 - The unavailability of equipment or transportation capacity to date has impacted and delayed EPA's efforts to perform the hazardous waste and debris cleanup components of the FEMA mission assignments. Requests for transport of equipment have been made through the proper channels at the NRCC. There have been significant difficulties in scheduling barge space to transport equipment from CONUS. There appears to be progress in this area, however, the barge schedule has not been resolved. The plan is now focused on the equipment leaving from Jacksonville, FL where there are least two barges leaving daily for Puerto Rico. We are pursuing space within that operation to target a departure date of 10/18.
 - A staging area at the US Army Garrison - Ft. Buchanan, in Guaynabo, has been secured for the staging of equipment to support EPA's debris MAs. This location will only be used to stage equipment and will not be a hazardous materials staging area.

Puerto Rico Sites - Under Consideration for Debris Staging

| Zone | Site ID | Municipality | GPS Coordinates | Description | Owner | Type of Site | | Proposed Type of Debris to be Managed | | | | | | | | | |
|------|---------|---------------|-----------------------|---|---|--------------|------|---------------------------------------|-------------------------|--------------|-----|-------|-------------|-----|------|--------------|---|
| | | | | | | TDS | TDSR | LANDFILL | Clean Vegetative Debris | Mixed Debris | HTW | Tires | White Goods | C&D | Mech | Ash/Residues | |
| 1 | 100 | Naguabo | 18.21347, -65.72506 | Former Industrial Site with over 38.5 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | | X | | X | | | | | | | | |
| 1 | 101 | Fajardo | 18.30971, -65.663130 | Old Airport Facility (Unknown Acres) | Land Authority | | X | | X | | X | | | | | | |
| 1 | 102 | Vieques | 18.149028, -65.416931 | Vieques Sanitary Landfill: Existing Landfill Facility in compliance with EQB / EPA Regs (Unknown Acres) | Municipality of Vieques | X | | | | | X | X | X | | | | |
| 1 | 103 | Canovanas | 18.385917, -65.877568 | Former Industrial Site (Unknown Acres) | Puerto Rico Industrial Development Corporation (PRIDCO) | X | | | | | X | X | X | | | | X |
| 1 | 104 | Culebra | 18.317959, -65.276760 | Culebra Site in front of PRASA: Raw Land in front of PRASA Waste Water Treatment Plant with 10 Acres apron. | Puerto Rico Industrial Development Corporation (PRICO) | | | X | | X | | | | | X | X | X |
| 1 | 105 | Humacao | 18.128110, -65.806972 | El Coqui Landfill: Existing Landfill Facility in compliance with EQB / EPA Regs. | EC Waste LLC | X | X | X | X | X | X | X | X | X | X | X | X |
| 2 | 106 | Toa Baja | 18.426793, -66.187961 | Old Military Base with over 200 Acres | Sabana Seca Partners | | | | | | X | X | X | | | | |
| 2 | 107 | Toa Baja | 18.423514, -66.111988 | Sabana Seca Naval Station: Raw Land with over 100 Acres | Federal Government | | X | | X | X | | | | | | | |
| 2 | 108 | Bayamon | 18.386858, -66.133825 | Commercial Site Near Centro: Proposed Mall Site with over 20 Acres | Mora Development | | X | | X | X | | | | | | | |
| 2 | 109 | Trujillo Alto | 18.361946, -65.995524 | Las Cuevas Industrial Park: Industrial Site with 8.2 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | | | X | | | | | | | X | X | X |
| 2 | 110 | Bayamon | 18.359634, -66.140202 | Mimilas Industrial Subdivision: Former Industrial Site with 2.4 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | | | X | | | | | | | X | X | X |
| 3 | 111 | Vega Baja | 18.271437, -66.231892 | Cabo Caribe Ward Industrial Site with 10.1 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | | | X | | | | | | | X | X | X |
| 3 | 112 | Vega Alta | 18.417595, -66.329843 | Espinosa Ward: Former Industrial Site with 5.7 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | | | X | | | | | | | X | X | X |
| 3 | 113 | Arecibo | 18.448506, -65.567500 | Santana Ward: Industrial Site with 24.74 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | X | | | X | X | | | | | | | |
| 3 | 114 | Arecibo | 18.459770, -66.701138 | Energy Answer: Site: Raw Land with 50 Acres | Energy Answer | | | | | | | | | | | | |
| 4 | 115 | Mayaguez | 18.218616, -67.161086 | Mayaguez Foreign Trade Zone: Former Industrial Site with 8.8 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | | | X | | X | | | | | | | |
| 4 | 116 | Aguiadilla | | Montaña Industrial Area: Former Industrial Site with 12.65 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | | | X | | X | | | | | | | |
| 5 | 117 | Guayanilla | 18.037764, -66.800622 | Quebradas Ward: Former Industrial Site with 7.1 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | X | | | X | X | | | | | | | |
| 5 | 118 | Ponce | 17.984468, -66.672409 | Clean Debris (El Tuque): Raw Land with 15 Acres | Cantera El Tuque Inc. | | | X | | X | | | | | X | X | X |
| 6 | 119 | Salinas | 18.016482, -66.259791 | Camp Santiago Army Site: Formerly used as debris collection and Processing site with over 100 Acres | Federal Government | | X | | X | | | | | | X | X | X |
| 6 | 120 | Guayama | 17.953313, -66.158954 | Jobos Ward: Industrial Site with 10.0 Acres | Puerto Rico Industrial Development Corporation (PRIDCO) | X | | | X | X | | | | X | | | |

USVI Debris Mission.

- EPA has been requested to assist with the handling and disposal of HHW, medical waste and e-waste. EPA will also assist with the preparation of white goods for recycling by VIWMA. A collection area has been identified on STX which is located adjacent to the Limetree Facility. EPA will also potentially conduct air monitoring at the collection area for standard chemicals of concern associated with this type of activity.
- EPA personnel began planning for the transportation & disposal of stockpiled medical waste at the hospitals on Christiansted (St. Croix, approx. 50,000 lbs) and on St Thomas (approx. 80,000 lbs).
- EPA response contractors met with the Department of Public Works to begin setting a time table for preparing a dedicated site for collection of Household Hazardous Waste (HHW) and the processing of white goods. Initial target date to begin collection is for 10/18/17 coinciding with the arrival of key supplies for this work.
- USACE has requested EPA assistance with air monitoring during the USACE's air curtain burning of vegetative debris activities should the burn take place. USACE intends to segregate construction and demolition (C&D) debris prior to burn operations. The C&D debris will be handled by VIWMA. The VI government is allowing the vegetative debris burning option to continue within the debris management planning. Operations are moving forward. (Note: former EPA Region 2 Regional Administrator Judith Enck is in the USVI and has recommended that the USVI government not proceed with burning of vegetative debris, but rather to undertake to chip and mulch all of it. EPA and USACE agree that chipping and reuse is desirable, but believe there is too much of such debris, and that burning some of it will be necessary.)

AIR MONITORING

Puerto Rico. EQB is planning to conduct an assessment on the conditions of the ambient air monitoring network. The network was taken offline prior to Hurricane Maria landfall. There is no update or information on the status or damages. They will staff an assessment team once their employees are able to return to the office.

EMERGENCY RESPONSE

| Daily/Cumulative Summary of Hazard Evaluations/Recovery for Hurricane Maria | | | | |
|---|------------|------------|------------|------------|
| Status | Opened | | Closed | |
| | 10/10/2017 | Cumulative | 10/10/2017 | Cumulative |
| Puerto Rico | 0 | 0 | 0 | 0 |
| U.S. Virgin Islands | 0 | 4 | 0 | 0 |

Note: Open means that the target is yet to be recovered. Closed means the target was recovered, left in place, or access was denied to collect the item.

PUERTO RICO

| | CONTAINERS | | | TOTAL |
|---------------|--------------------|-----------------------------------|-----------------------------------|-------|
| | Drums (55 Gals) | Large Containers (<55 gals) | Large Containers (>55 gals) | |
| 10/10/2017 | 0 | 0 | 0 | 0 |
| Total to Date | 0 | 0 | 0 | 0 |

U.S. VIRGIN ISLANDS

| | CONTAINERS | | | TOTAL |
|---------------|--------------------|-----------------------------------|-----------------------------------|-------|
| | Drums (55 Gals) | Large Containers (<55 gals) | Large Containers (>55 gals) | |
| 10/10/2017 | 0 | 0 | 0 | 0 |
| Total to Date | 0 | 0 | 0 | 0 |

SPILL/RELEASE RESPONSE

| Hotline Calls as of October 11, 2017 | |
|---|----|
| Number of Maria Related Calls Received During Reporting Period | 0 |
| Total Number of Maria Related Calls to Date | 10 |
| * EPA is assessing each call through the NRC to determine appropriate response and forwarding reports to field personnel to conduct further assessments and response as needed. | |

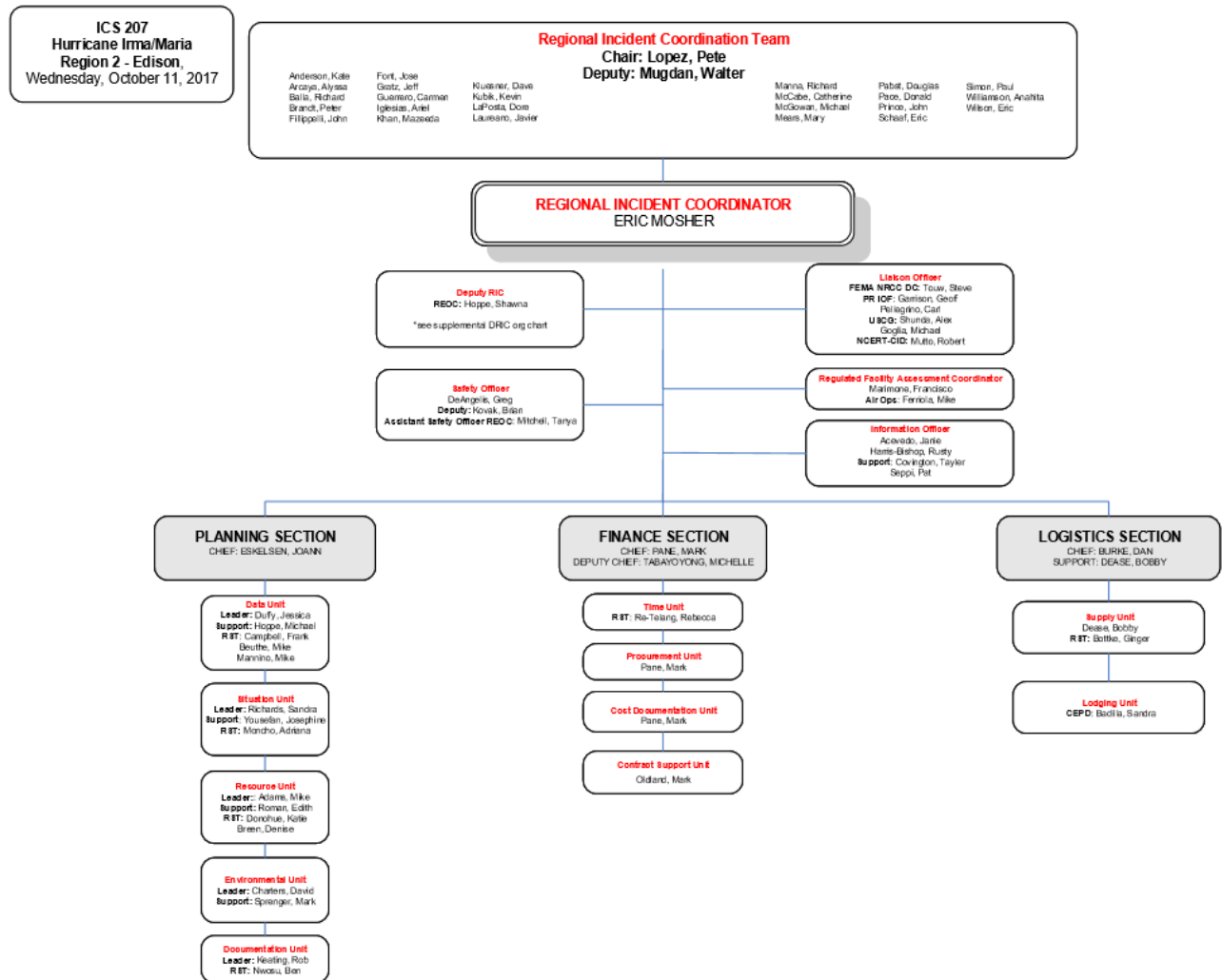
SUPERFUND NPL, SUPERFUND REMOVAL, AND OIL REMOVAL SITES

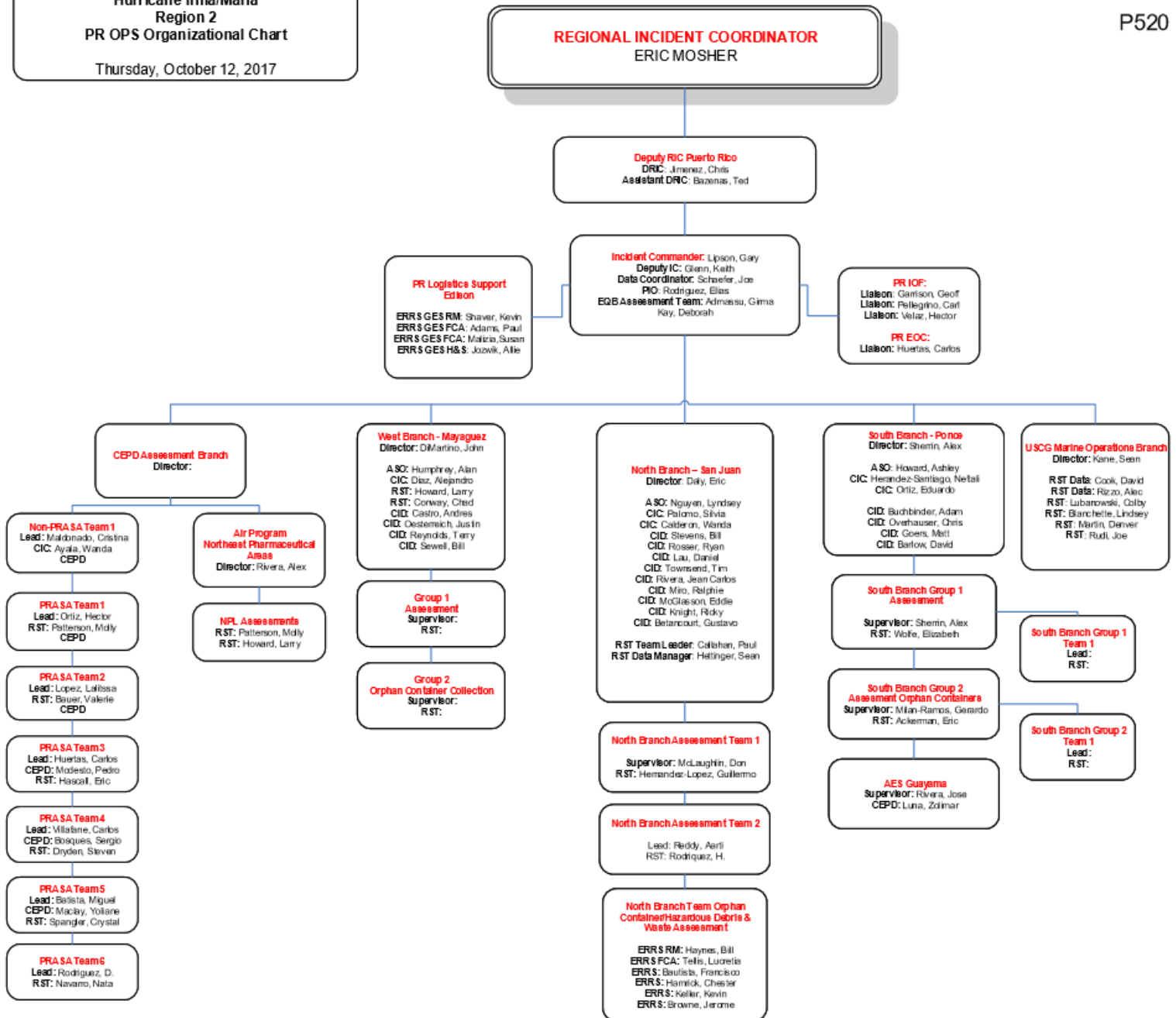
EPA personnel continue to conduct preliminary assessments at Superfund or Oil Response Sites in Puerto Rico and evaluate the potential off-site impacts as a result of Hurricane Maria. The REOC is currently following up with the RPMs for each site.

On 10/11, the teams assessed the Hormigas Superfund site and the Dorado Superfund site in Caguas where reports indicated residents might be extracting water from the wells on the sites. Weather permitting, the San Germán Superfund site will be assessed today. The sites will be secured and EPA will notify FEMA/PREMA to verify or initiate supplying water to these communities so they have a known safe drinking water source. Our public affairs and CIC staff are addressing media and community outreach actions to warn the public about accessing these sites. The PR EPA Incident Commander will address the securing of these sites with the RPMs.

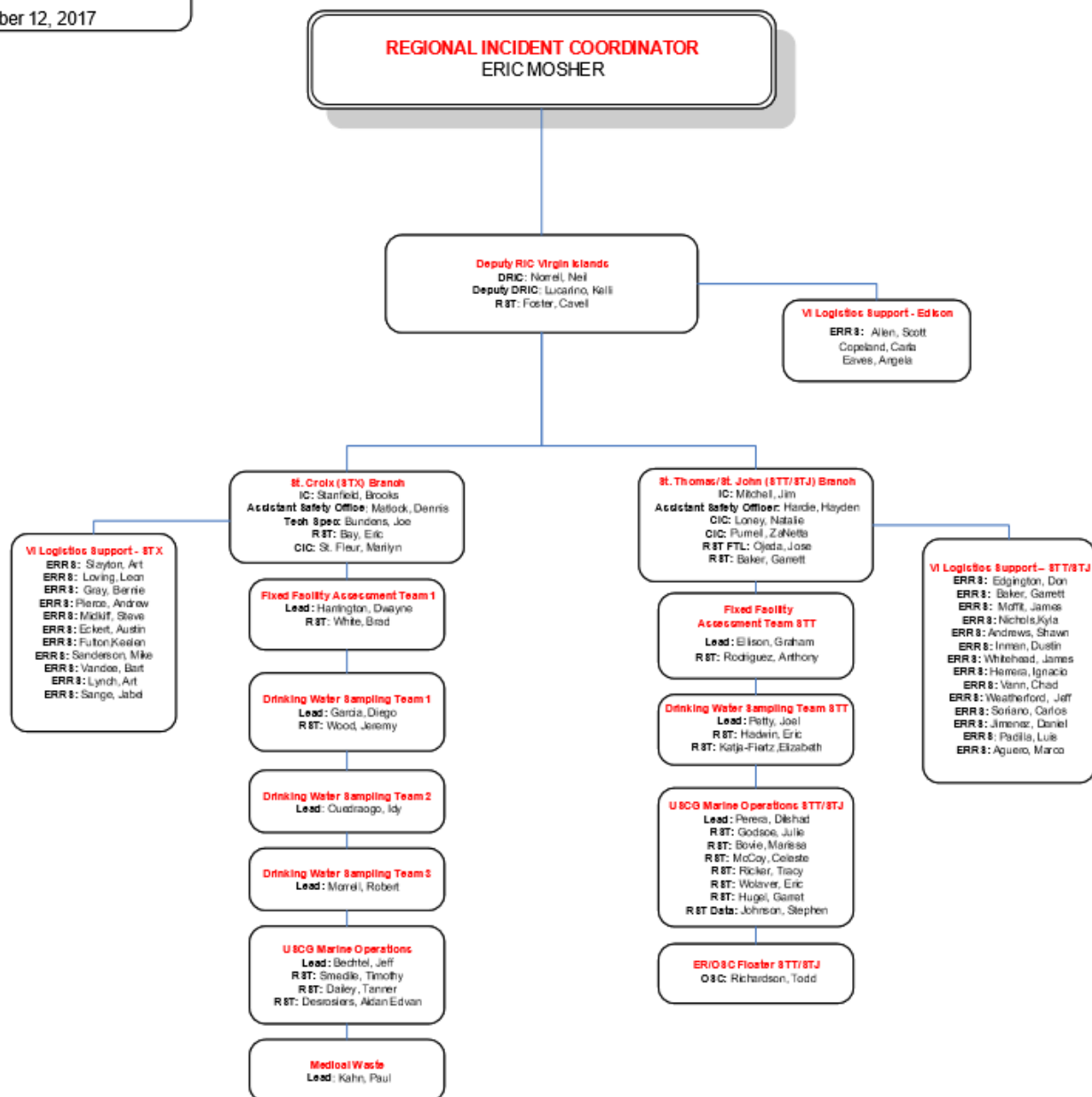
| Hurricane Contingency Site Summary (Remedial, Removal and Oil)** | | | | | | | |
|--|-------|---------------------|-------------------------------------|---|------------|---|-------------------------|
| as of October 11, 2017 | | | | | | | |
| Site | State | Type * | Phase 1 Post-storm Assessment | Phase 2 Site Inspection Needed | Inspected | Phase 3 Additional Response Action | All Phases Completed |
| Puerto Rico | | | | | | | |
| Atlantic Fleet Weapons Training Area (Vieques)**** | PR | NPL | | | | | |
| Barceloneta Landfill | PR | NPL | | | | | |
| Battery Recycling Co. (Puerto Rico Battery) | PR | NPL & Removal & Oil | 9/22/2017 | N | N/A | N | 9/22/2017 |
| Cabo Rojo Groundwater Contamination | PR | NPL | | | | | |
| Cidra Groundwater Contamination | PR | NPL | 10/5/2017 | N | N/A | N | 10/5/2017 |
| Corozal Well | PR | NPL & Removal | 9/24/2017 | N | N/A | N | 9/24/2017 |
| Culebra**** | PR | Other | | | | | |
| Dorado Groundwater Contamination, Dorado | PR | NPL | | | | | |
| Fibers Public Supply Wells | PR | NPL | 10/5/2017 | Y | | | |
| Fort Buchanan | PR | Other | 10/6/2017 | N | N/A | N | 10/6/2017 |
| Frontera Creek | PR | NPL | 10/5/2017 | N | N/A | N | 10/5/2017 |
| GE Wiring Devices | PR | NPL | 10/6/2017 | Y | | | |
| Guaynilla Bay Oil Spill*** | PR | Oil | 10/6/2017 | Y | | | |
| Hormigas Groundwater Plume*** | PR | NPL | 10/6/2017 | Y | | | |
| Janssen, Inc. | PR | Other | | | | | |
| Juncos Landfill | PR | NPL | 9/30/2017 | Y | 10/5/2017 | N | 10/5/2017 |
| Maunabo Urbano Public Wells | PR | NPL | | | | | |
| Naval Security Group Activity | PR | NPL | 10/6/2017 | N | N/A | N | 10/6/2017 |
| Papelera Puertorriquena | PR | NPL | 9/29/2017 | N | N/A | N | 9/29/2017 |
| Pesticide Warehouse 1 | PR | NPL | 10/4/2017 | Y | | | |
| Pesticide Warehouse 3 | PR | NPL | 10/4/2017 | Y | | | |
| Prepa Palo Seco General Depot | PR | Other | | | | | |
| Puerto Rico Olefins | PR | Other | | | | | |
| Puma Caribe (CAPECO) | PR | Oil | 9/21/2017 | N | N/A | N | 9/21/2017 |
| RCA Del Caribe | PR | NPL | | | | | |
| San German Groundwater Contamination | PR | NPL | | | | | |
| Scorpio Recycling Inc.*** | PR | NPL | 10/5/2017 | Y | | | |
| U.S. Naval Station | PR | Other | 10/6/2017 | N | N/A | N | 10/6/2017 |
| Upjohn Facility*** | PR | NPL | 9/30/2017 | Y | | | |
| V&M Albaladejo | PR | NPL | | | | | |
| Vega Alta Public Supply Wells*** | PR | NPL | 9/30/2017 | Y | | | |
| Vega Baja Solid Waste Disposal | PR | NPL | 10/4/2017 | N/A | | | |
| USVI | | | | | | | |
| Cruz Bay Oil Tank | VI | Oil | 10/9/2017 | Y | 10/11/2017 | Y | |
| Island Chemical Corp./Virgin Islands Chemical Corp. | VI | NPL | 10/5/2017 | N | N/A | N | 10/5/2017 |
| Krum Bay Oil Spill at WAPA Facility | VI | Oil | 10/1/2017 | N | N/A | N | 10/1/2017 |
| Tutu Wellfield*** | VI | NPL | 10/3/2017 | Y | | | |
| * NPL and/or Removal and/or Oil - sites that have both active Remedial, Removal and/or Oil Program components | | | | | | | |
| Other - sites are either Federal facilities, Superfund Alternative Sites or that are otherwise being managed by the Remedial Program | | | | | | | |
| ** Only includes active removal and oil sites | | | | | | | |
| ***ERRD/RPM reviewing Phase 1 Post Storm Assessment to determine if Phase 2 Site Inspection is warranted | | | | | | | |
| ****Navy/USACE Federal Facility Lead for Assessment | | | | | | | |
| All Phases Completed | | | | | | | |

REGION 2 RESPONSE ORGANIZATION (ICS 207)



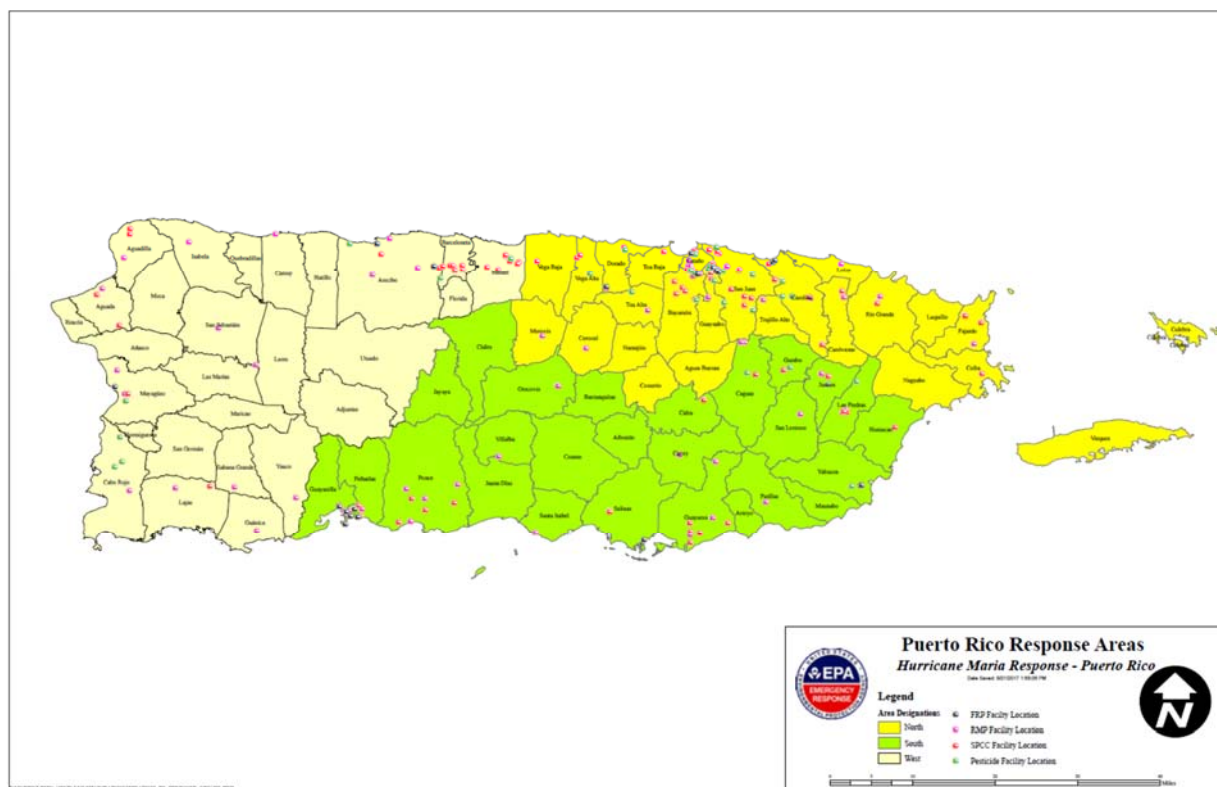


ICS 207
Hurricane Irma/Maria
Region 2
VI OPS Organizational Chart
Thursday, October 12, 2017



FIELD RESPONSE ACTIVITIES

PUERTO RICO



- The EPA Deputy RIC for Puerto Rico and Incident Commander/Operations Section Chief has separated Puerto Rico into three Branches; the North Branch, South Branch, West Branch, Marine Operations with USCG; and CID security support. A PIO Coordinator is supporting Incident Command. Additional personnel, both EPA and contractors, continue to mobilize to PR in support of the mission assignments.
- The Puerto Rico Incident Commander is coordinating with the CEPD Water Inspectors, remedial and RCRA staff on site and facility assessments.
- EPA is currently coordinating with the USACE in support of EPA's hazardous materials removal operations Mission Assignment. USACE is currently evaluating several locations for debris collection staging areas. EPA plans to co-locate hazardous material staging areas at all identified staging locations. Until USACE's areas are identified, EPA is coordinating with EQB to establish a temporary hazardous materials staging area.
- The EPA Emergency and Rapid Response Services (ERRS) contractor has developed a plan to mobilize a barge with all the necessary equipment to support the debris MAs. The scheduled 10/18 ETA of the barge has been delayed because FEMA has the vessel shipping contract to PR booked until 10/26. EPA is working with FEMA to secure barge space on an earlier voyage. EPA's ERRS contractor is currently on PR to meet

the barge and provide logistical support. A staging area at the US Army Garrison - Ft. Buchanan, in Guaynabo, has been secured for the staging of this equipment. This location will only be used to stage equipment and will not be a hazardous materials staging area.

- **North Branch**

- After a day of needed rest, assessment operations restarted on 10/09/17. The two assessment teams visited facilities in Fajardo, San Juan, Corozal, Morovis, Vega Alta, and Manati.

- **South Branch**

- Following the establishment of the South Branch Team, assessment of fixed facilities began on 10/9/17. The two teams in South Branch visited facilities in Yabucoa, Humacco, Guayanilla, and Penuelas.

- **West Branch**

- On 10/9 team members assessed RMP/FRP/SPCC facilities in Barcenloneta municipality. The branch reports that driving conditions were hazardous due to the heavy rainfall and closed roads. The ASO recommends that any travel in the mountainous areas be conducted early in the day due to afternoon rain and thunderstorms.

- **USCG Marine Operations**

- USCG, EPA and contractors are establishing marine operations to assess sunken vessels in the eastern-most coast of PR. It is expected that up to four teams will be established to conduct on the water operations to locate and evaluate the condition of sunken vessels. Operations commenced on 10/9/17.

- **Critical Resources Needs/Issues:**

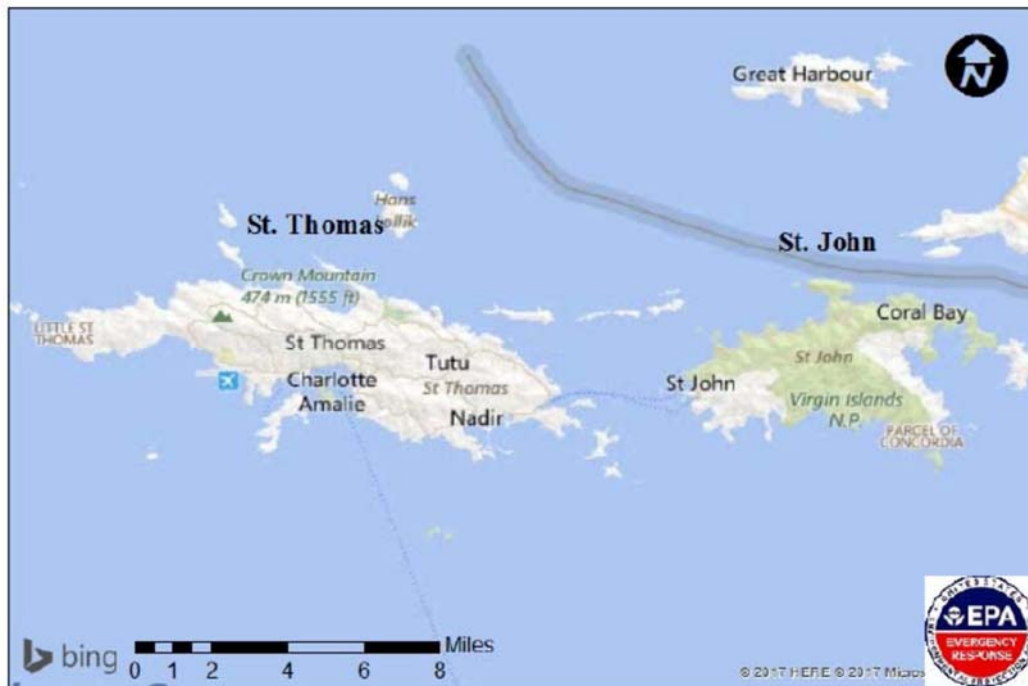
- Commercial air traffic to PR and remains limited; several flights were cancelled on 10/8. In addition, hotel accommodations are limited, sometimes necessitating double rooming. The lack of equipment transport capacity to date has seriously impacted and delayed EPA's ability to perform the hazardous waste and debris cleanup components of the FEMA mission assignments. Requests for berthing of personnel and transport of equipment have been made through the proper channels at the NRCC, and progress in this area is noted in the Incident Command portion of the SITREP.
- Fuel to run generators is becoming scarce, Additional generators are needed to support critical infrastructure.

- Cellular communications and internet connectivity intermittent in most areas of PR, making communication with the field teams difficult, though recent progress has been observed. Satellite phones have been distributed to field teams to address communication challenges.

FEMA IOF and PR EOC

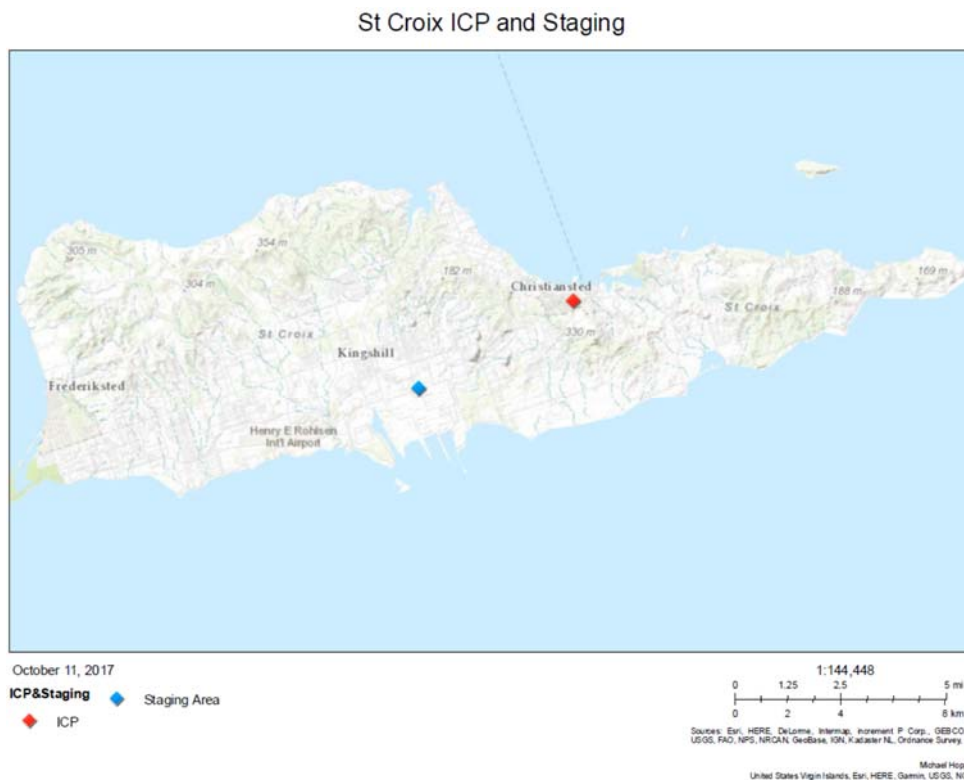
- EPA continued coordination with FEMA, the USACE, USCG, and the Commonwealth of PR.

U.S. VIRGIN ISLANDS

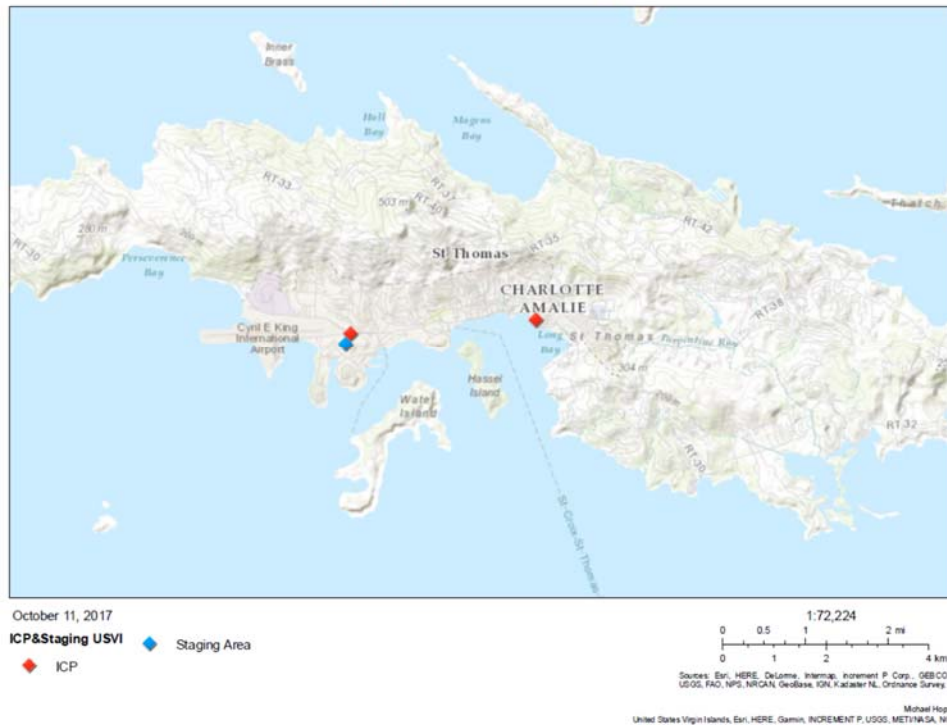




The EPA Deputy RIC for the U.S. Virgin Islands (USVI) and Incident Commander/Operations Section Chiefs have separated the USVI into three incident areas by island; St. Croix, St. Thomas, and St. John. EPA and contractor resources are currently deployed in St. Croix and St. Thomas. St. John is currently not accessible to EPA responders. Below are the locations of our Incident Command Posts (ICP) and hazardous waste/debris staging areas on STX and STT.



St Thomas ICP and Staging



- **STX:**

- Continued conducting facility assessments. The facility assessments for STX are anticipated to be complete by the end of the week.
- EPA continues to coordinate with the USCG on supporting vessel recovery operations.
- EPA ERRS contractor procured a method for shipping of materials and equipment to the USVI. The materials and equipment will be shipped via barge leaving the port in Fort Lauderdale, Florida Thursday October 12th and will arrive in STT Sunday October 15th. The barge will off load some materials and equipment in STT and will then travel to STX and off load the remaining materials and equipment on Monday October 16th.

- **STT/STJ:**

- EPA continued the assessment of EPA regulated facilities.
- EPA IC attended the Emergency Operations Briefing for ESFs at Virgin Islands Territory Emergency Management Agency (VITEMA). Summary of each ESF day's activities is provided to FEMA by each ESF lead.
- EPA IC attended a FEMA/USACE school opening meeting and briefed the agencies on EPA progress on sampling potable water sources for schools they are trying to open. The following schools were opened on 10/10/2017:

1. Charlotte Amalie High School
2. Bertha Boschulte, Junior High
3. Jane E. Tuitt Elementary
4. Leonard Dober Elementary
5. Joseph Gomez Elementary
6. Joseph Sibley Elementary

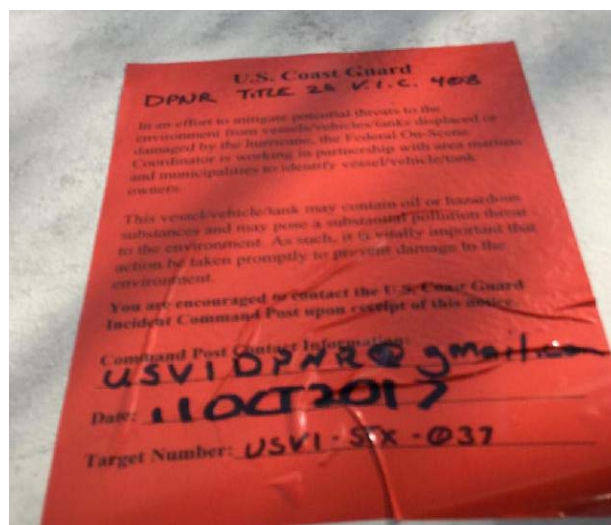
These schools will not be using the public water provide by WAPA for drinking and washing hands until sample results indicate its safe for consumption by the DPNR.

- EPA continues to coordinate with DPNR on the pesticides and herbicides contained at the Cost U Less (membership type wholesale club) store that had sustained heavy storm damage. EPA intends to revisit the store to ensure proper handling of the materials is occurring.
- EPA continues to coordinate with the USCG on supporting vessel recovery operations.

- **USCG Marine Operations**

- EPA will assist the USCG in recovery efforts of sunken vessels by providing data collection and management support and assistance with disposal of oil and hazardous materials recovered from the vessels on all three islands.
- Land based and water based vessel assessment teams consisting of one DPNR, one RST and two USCG personnel will evaluate and create a data entry for each of the approximately 50 distressed boats around STX. The same process will be followed for STT and STJ.
- EPA and the DPNR/USCG assessment teams went through all the data points for distressed vessels identified on the NOAA Environmental Response Management Application (ERMA) for St Croix. The data points were either confirmed as representing a real vessel, a vessel yet to be assessed or a data point which is no longer applicable.
- Land based and water based teams will resume operations to ground truth the remaining ERMA points.
- EPA RST will continue inputting the vessel assessment info into Response Manager.
- DPNR is compiling a list of owners of the distressed vessels based upon their initial assessments. Owners will be notified by phone, by certified letter and by public service announcements that their vessel needs to be removed.

- USCG will contract either National Response Corp (NRS) and/or Resolve Maritime to remove and dispose of fuels from vessels. They will also remove the batteries and dispose of them through VI Regulated Waste.
- NRC personnel were on site to look at the two active fuel leaks, one from the pilot boat near the refinery and one from a sport fishing boat in Salt River. These two will be addressed first once fuel removal operations commence.



- **Critical Resource Needs/Issues:** Although commercial air traffic to the USVI has increased, flights to and from the islands remain limited. This is making transport of personnel and equipment needed to support the missions assigned and requested of EPA difficult. Requests for transport of personnel and equipment have been made

through the proper channels at the NRCC. Lodging is in short supply, and remains a critical factor in determining the speed of EPA's transfer of personnel. Large quantities of bleach are needed to disinfect the contaminated cisterns. Request for bleach has been provided to FEMA. Fuel to run generators is becoming scarce and additional generators are needed to support critical infrastructure. Cellular communications and internet connectivity on all islands remains intermittent, making communication with the field teams difficult. Satellite phones have been distributed to address the gaps in cellular service. Driving conditions remain hazardous due to downed power poles/lines and power outages causing a lack of traffic signals making travel around the islands difficult and time-consuming. EPA is requesting FEMA assistance for berthing, the transportation of equipment, and the transport of personnel between STX and STT.

REGION 2 REGIONAL EMERGENCY OPERATIONS CENTER (REOC)

- Resource orders have been entered into the WebEOC Personnel Resource Log for a mobilization of an additional personnel. All EPA Regions, EPA HQ, and EPA Special Teams have been providing personnel resources. Region 2 will continue to move personnel and equipment into both Puerto Rico and the U. S. Virgin Islands depending on lodging/berthing limitations. EPA personnel are continuing to evaluate Superfund and Oil Sites in PR and USVI. The REOC is currently following up with ERRD and the OSC/RPMs for each site following preliminary assessments. The REOC is maintaining a hotline log of hurricane related calls and will reconcile them as personnel on the ground assess them.

EPA RESOURCES AS OF 10/11/2017

| Personnel | EPA Edison, NJ NYC | FEMA NRCC, DC | San Juan, Puerto Rico* | Mayaguez, Puerto Rico | Ponce, Puerto Rico | St. Croix USVI* | St. Thomas/St. John USVI* | Totals |
|-------------------|--------------------|---------------|------------------------|-----------------------|--------------------|-----------------|---------------------------|--------|
| EPA | 72 | 1 | 24 | 7 | 9 | 11 | 7 | 131 |
| CEPD (EPA) | 0 | 0 | 22 | 0 | 2 | 0 | 1 | 25 |
| START/RST | 14 | 0 | 16 | 2 | 2 | 5 | 12 | 51 |
| ERRS | 8 | 0 | 6 | 0 | 0 | 7 | 14 | 35 |
| Coast Guard^ | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Other Contractors | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 95 | 1 | 68 | 9 | 13 | 23 | 34 | 243 |

- *Number includes personnel working at IOF, EOC.
- ^Number includes Coast Guard personnel working directly with EPA.

AGENCY COORDINATION

Region 2 has one rep staffing the ESF-10 desk in the FEMA NRCC in Washington D.C. EPA has an OSC in the VITEMA/FEMA EOC bunker in St. Croix.

Environmental Response Management Application (ERMA). NOAA supports an ERMA viewer for both EPA Region 2 and the U.S Coast Guard. Aerial photos are available through the following link.

<https://erma.noaa.gov/caribbean/erma.html#/layers=3+36619+36620+36611+36618&x=-65.62791&y=18.14726&z=9&panel=layer>

DRINKING WATER / WASTEWATER

Puerto Rico Facility Assessment Summary

| Drinking Water and Wastewater Assessments (October 10, 2017) | | |
|--|-------------------|-------------------|
| Assessment Types | Daily Assessments | Total Assessments |
| On-Site DW Assessments | 0 | 26 |
| On-Site WW Assessments | 29 | 97 |

Puerto Rico Drinking Water Status

- **PRASA** – PRASA reports that **36%** of clients are without drinking water service. The La Plata Dam was reenergized and will be able to supply additional drinking water to 140,000 clients in the Metropolitan Area, including municipalities in Bayamon, Toa Baja, and Toa Alta.

- **Non-PRASA Water Treatment Systems:**

Currently working with FEMA, USACE, EPA, and DOH to coordinate federal support to Non-PRASA drinking water facilities. In Puerto Rico, there are 297 independent private and community water treatment systems that serve approximately 4% of the population. Details of proposed visit schedule for EPA and DOH Assessment Teams was sent to EPA Region 2 Puerto Rico Incident Coordinator.

EPA is working with PRDOH and DOD, HHS and FEMA, in assessing the non-PRASA drinking water systems throughout PR. Such systems provide drinking water from wells and surface water to isolated communities located in rural areas in PR. Deployed teams assess drinking water quality, assess the condition of the systems, and identify other immediate needs (i.e., food, shelter, medical support, etc.). Identified needs are referred to FEMA/PREMA.

Puerto Rico Wastewater Status:

- 22 of the 51 wastewater treatment plants (WWTPs) operated by PRASA are out of service.

- 29 WWTPs are working on alternate power.
- Most of the WWTPs that are out of service are not receiving any sewage due to collapsed trunk sewers or main pump stations with operational problems.
- Of the 22 WWTPs out of service, 14 are located upstream of a drinking water intake. These facilities are:
 - Aibonito (1.8 MGD) – Lack of Diesel.
 - Barranquitas (0.6 MGD) – Lack of Diesel.
 - Cayey (4.0 MGD) – Main trunk sewer collapsed, no sewage reaching the plant.
 - Comerio (1.0 MGD) – Main trunk sewer collapsed, no sewage reaching the plant.
 - Jayuya (1.0 MGD) – Lack of Diesel.
 - Utuado (2.0 MGD) - Main trunk sewer collapsed, no sewage reaching the plant.
 - Ciales (1.5 MGD) – Main trunk sewer collapsed, no sewage reaching the plant.
 - Morovis (1.7 MGD) – Alternate power unit out of service.
 - Unibon Morovis (0.2 MGD) – Lack of Diesel.
 - Corozal (1.25 MGD) - Main trunk sewer collapsed, no sewage reaching the plant. PRASA already has a contractor on site. It may take two weeks for repairs.
 - Naranjito (0.8 MGD) - Alternate Power Unit out of service.
 - San Sebastian New (1.0 MGD) – Facility suffered major equipment damages since it was completely flooded by the Culebrinas river.
 - San Sebastian Old (0.5 MGD) – Collapsed Trunk sewer, no entrance to the facility.
 - Maricao (0.25 MGD) - Main trunk sewer collapsed, no sewage reaching the plant.
- The remaining 8 WWTPs out of service are:
 - Fajardo (9.2 MGD) - Alternate Power Unit out of service.
 - Rio Grande Estates (0.8 MGD) - Alternate Power Unit out of service.
 - Humacao (8.2 MGD) – Alternate Power Unit out of service.
 - Yabucoa (1.5 MGD) Alternate Power Unit out of service.
 - Carolina (45 MGD) – Main Pump Station (Torrecillas) out of service. No influent to the plant.

- Arecibo (10.0 MGD) – Influent Pump Dry Pit Flooded.
- Dorado (4.05 MGD) - Facility suffered major equipment damages since it was completely flooded by the La Plata river.
- Toa Alta (0.8 MGD) – Plant was flooded, major equipment damages.
- The main trunk sewer that feeds the Barceloneta WWTP (8.0 MGD) was repaired and the overflow ceased yesterday.
- PRASA owns close to 800 sanitary pump stations. PRASA has been able to assess around 80% of the pump stations.
- Today, at least 247 sanitary pump stations are overflowing sewage due to lack of power, malfunctioning power generator or pumping problems.
- Of these 247 pump stations, 92 are located upstream of a water supply intake.
- The biggest concern is the Torrecillas Pump Station, which is tributary to the Carolina WWTP and is the largest pump station in the island. The station, which currently pumps around 25 MGD suffered major damages due to flooding.

USVI Facility Assessment Summary

| Drinking Water and Wastewater Assessments (October 10, 2017) | | |
|--|-------------------|-------------------|
| Assessment Types | Daily Assessments | Total Assessments |
| On-Site DW Assessments | 79 | 355 |
| On-Site WW Assessments | 0 | 0 |

USVI Drinking Water Status

- DPNR plans to initiate a 3-month alternative drinking water monitoring procedure, and will re-evaluate the need to continue at the end of the 3-month period. The monitoring procedure will shift from compliance monitoring to surveillance monitoring, with focus on bacteria and chlorine. The DPNR has not issued a press release yet. When they do, it will be forwarded to DW/WW, then from there forwarded to PAD. Additionally, a boil water advisory will remain in place across the USVI.
- VIWAPA is reporting:
 - While water service remains available throughout Cruz Bay, St. John, there are two days of emergency water storage on the island.
 - There are six days of emergency water storage on St. Thomas. The Water Division continues to work with electrical crews to re-energize additional pump stations. The water division is working with FEMA and WAPA electric crews to restore service to two pumps stations which are currently off line. The pump stations, once restored would allow a resumption of potable water to Savan and Contant Knolls communities.

- On St. Croix, there are four days of emergency water storage. WAPA is pumping at full capacity at Contentment, Mount Welcome and Concordia pump stations. This has facilitated water service to mid-island and Frederiksted town.
- Field Reports
 - STX:
 - EPA completed the assessments of potable drinking water supplies at the schools prioritized for re-opening by the V.I. Dept. of Education.
 - Drinking water sampling continued in coordination with DPNR. Samples collected are taken to the Ocean Systems Lab on STX for microbial analysis.
 - DPNR continues to resample facilities which had previously tested positive for the presence of bacteria.
 - EPA continues to coordinate drinking water sampling with DPNR. DPNR continues to notify the proprietors of the affected systems to ensure proper disinfection measures are taken.
 - STT/STJ:
 - EPA completed the assessments of potable drinking water supplies at the schools prioritized for re-opening by the V.I. Dept. of Education on STT and STJ.
 - Drinking water sampling activities continue. EPA continues to coordinate drinking water sampling with DPNR. Samples collected are taken to the Ocean Systems Lab on STT for microbial analysis.
 - EPA is continuing to coordinate with DPNR to prioritize drinking water facilities to be assessed and sampled.



USVI Wastewater Status

- VIWMA continues assessments of all waste water facilities. Most facilities assessed to date either need a generator to power the facility or fuel for the facility. All critical needs for the facilities have been relayed to the appropriate ESF. No further action has been requested of EPA at this time.

USVI Drinking Water Laboratory Information

- No update during the reporting period.

REGULATED FACILITIES

Puerto Rico

| Facility Type | Field Assessments Completed On 10/10/2017 | Field Assessments On 10/10/2017 Requiring Follow-up Action | Total Field Assessments Completed to date |
|----------------|---|--|---|
| RMP | 1 | 1 | 40 |
| FRP | 1 | 1 | 26 |
| SPCC (non-FRP) | 2 | 0 | 37 |
| Total | 4 | 2 | 103 |

U.S. Virgin Islands

| Facility Type | Field Assessments Completed On 10/10/2017 | Field Assessments On 10/10/2017 Requiring Follow-up Action | Total Field Assessments Completed to date |
|----------------|---|--|---|
| RMP | 0 | 0 | 1 |
| FRP | 0 | 0 | 3 |
| SPCC (non-FRP) | 1 | 0 | 19 |
| Total | 0 | 0 | 23 |

The Regulated Facility Assessment Coordinator (RFAC) continues to coordinate damage assessment and field assessment referral information with other R2 inspection programs working in UST, Federal Facilities, RCRA, CAA, and NPDES. The UST program remains in touch with DPNR and EQB UST program managers, and continues to provide updates on gas stations in the USVI and PR. The Federal Facilities Coordinator has been following up with federal facilities in PR and the USVI, and is periodically updating the RFAC as appropriate.

LONG RANGE PLANNING

Hurricane Irma Recovery Update:

- **NDRF and FEMA Recovery Support Function(s):**
 - NDRF activation: The NDRF still has not yet been activated in either PR or the VI. The Federal Disaster Recovery Officer (FDRO) is in the Virgin Islands and the Federal Disaster Recovery Coordinator (FDRC) has still not been deployed.
 - Recovery Support Functions (RSFs): CASD has prepared a staffing plan (both NY and PR staff) for all 6 Recovery Support Functions (RSFs) which include Community Planning & Capacity Building, Economic, Housing, Health & Human Services, Infrastructure, and Natural & Cultural Resources.
 - The Community Planning and Capacity Building RSF coordinator was deployed.
 - The Health and Social Services RSF Coordinator is asking EPA to do a full EJ analysis for all islands, data on water/water facilities connected with/to health care facilities, and a list of superfund/brownfield sites situated near health care facilities.
 - Mission Scoping Assessment (MSA) and Recovery Support Strategy (RSS) Planning: EPA has been participating in the daily the daily Regional Interagency Coordination team recovery meetings organized by FEMA. These meetings are preliminary planning meetings that will support long term

recovery and support the development of the Recovery Support Strategies (RSS).

- **National Coordination:**

- Office of Water (OW): Sandra Connors, Deputy Office Director in OW's Office of Wetlands, Oceans and Watersheds, will meet with the Region to discuss her Office's potential support for the regional recovery efforts.
- Office of Policy (OP): OCFO is collecting proposals for what EPA could contribute if Congress was to appropriate additional funds for hurricane recovery. Below is the write-up that we prepared to support all three recovery efforts.
- Office of Land and Emergency Management (OLEM): Region 2 is working with Adam Klinger, senior analyst from OLEM's within the Office of Communications, Partnerships and Analysis (OCPA) on a potential project using brownfields/waste sites to site renewable energy for critical infrastructure.

- **Emerging Recovery Issues:** Housing that is supported by resilient infrastructure, resilient and affordable power distribution and generation, infrastructure repair, maintenance and resiliency, workforce development to support recovery (e.g., housing, debris removal) and a more robust long-term economy, long-term disaster debris/solid waste management, technical assistance for better community and mitigation planning as well science and data that can be used for recovery decision-making.
- Senior Leadership from EPA Regions 2, 4 and 6 have been requested to appear at a briefing for members and staff of the House Energy & Commerce Committee on Friday, 10/13. The purpose is "to articulate an assessment of the damage to air (RMP and NAAQS), drinking water, soil (including RCRA and CERCLA issues), progress made to remedy that damage, a plan to respond to such remaining damage, and any challenges to remediation." State officials from Texas and Florida have been invited (but there is no indication that PR or USVI officials have been invited).
- EPA has commenced compiling estimates of needs for recovery, including preliminary cost estimates. R2 is coordinating this effort with HQ.
- **Topics of Interest from FEMA Daily Reports:** Nothing to report.
- **Other:** Nothing to report.

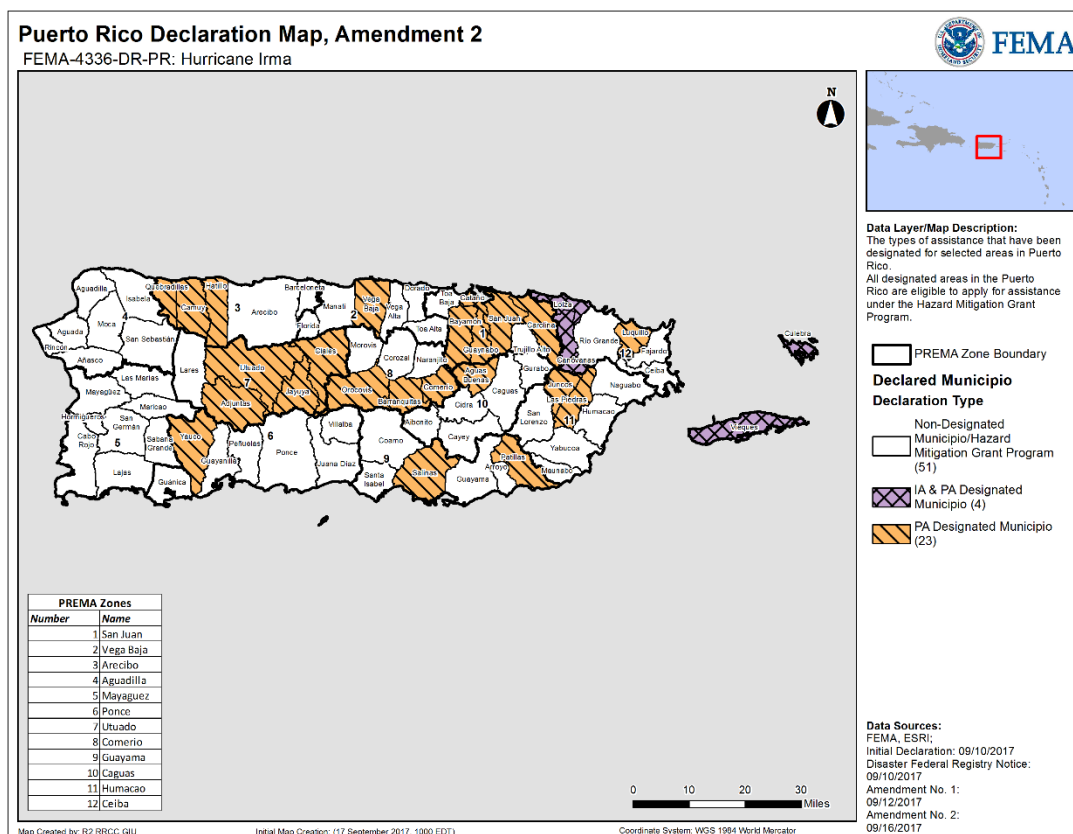
DECLARATIONS FOR HURRICANE IRMA

Puerto Rico.

Emergency Declaration FEMA-3384-EM effective September 5. Assistance is for all 78 municipalities in the Commonwealth of PR. The Governor of Puerto Rico requested a disaster declaration 9/8.

Disaster Declaration FEMA-4336-DR effective September 9. Declared areas only include Culebra and Vieques. On 9/13 ten additional municipalities in Puerto Rico were added to the major declaration, and are now eligible for work under any DFA MA's that we receive. The municipalities are: Adjuntas, Canovanas, Carolina, Guaynabo, Juncos, Loiza, Luquillo, Orocovis, Patillas, and Utuado.

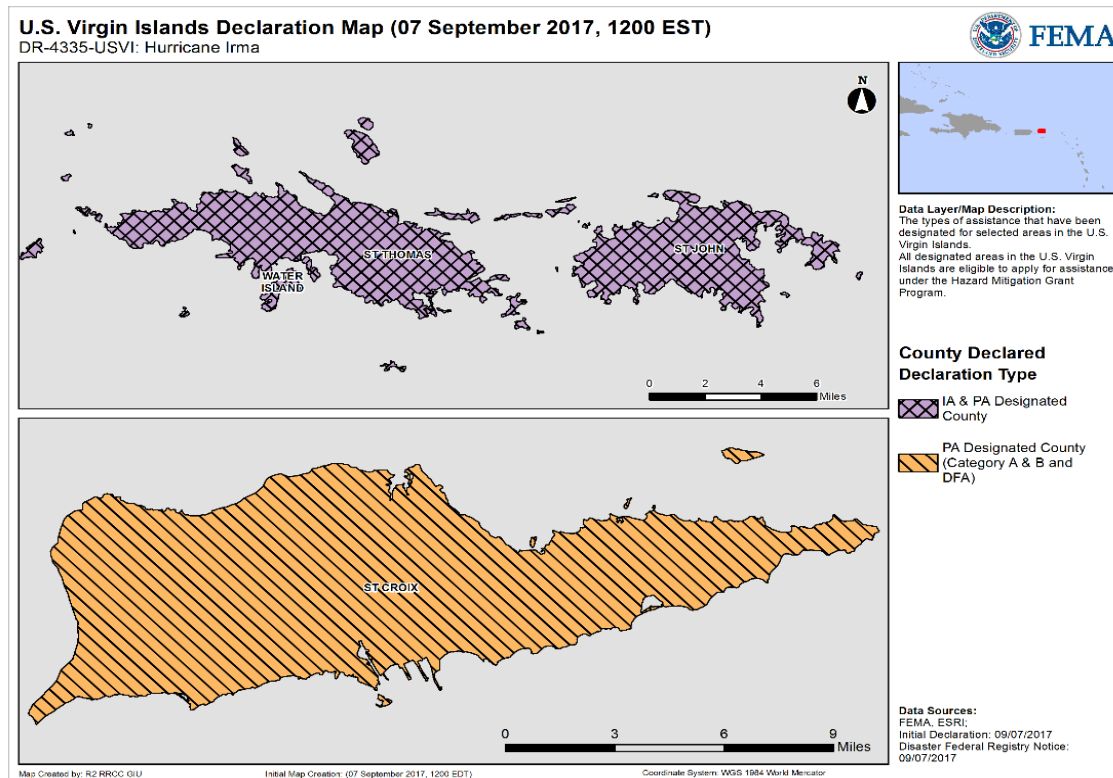
On 9/15, fifteen additional municipalities were added to the major declaration and are now eligible for Public Assistance. The municipalities are: Aguas Buenas, Barranquitas, Bayamón, Camuy, Cataño, Ciales, Comerío, Hatillo, Jayuya, Las Piedras, Quebradillas, Salinas, San Juan, Vega Baja, and Yauco..



U.S. Virgin Islands.

Disaster Declaration FEMA-4335-DR effective September 7, 2017. St. Thomas and St. John approved for Individual Assistance, all islands eligible for Public Assistance and the Hazard Mitigation Grant Program.

Emergency Declaration FEMA-3383-EM effective September 5. Assistance is for all islands in the Territory of the USVI.



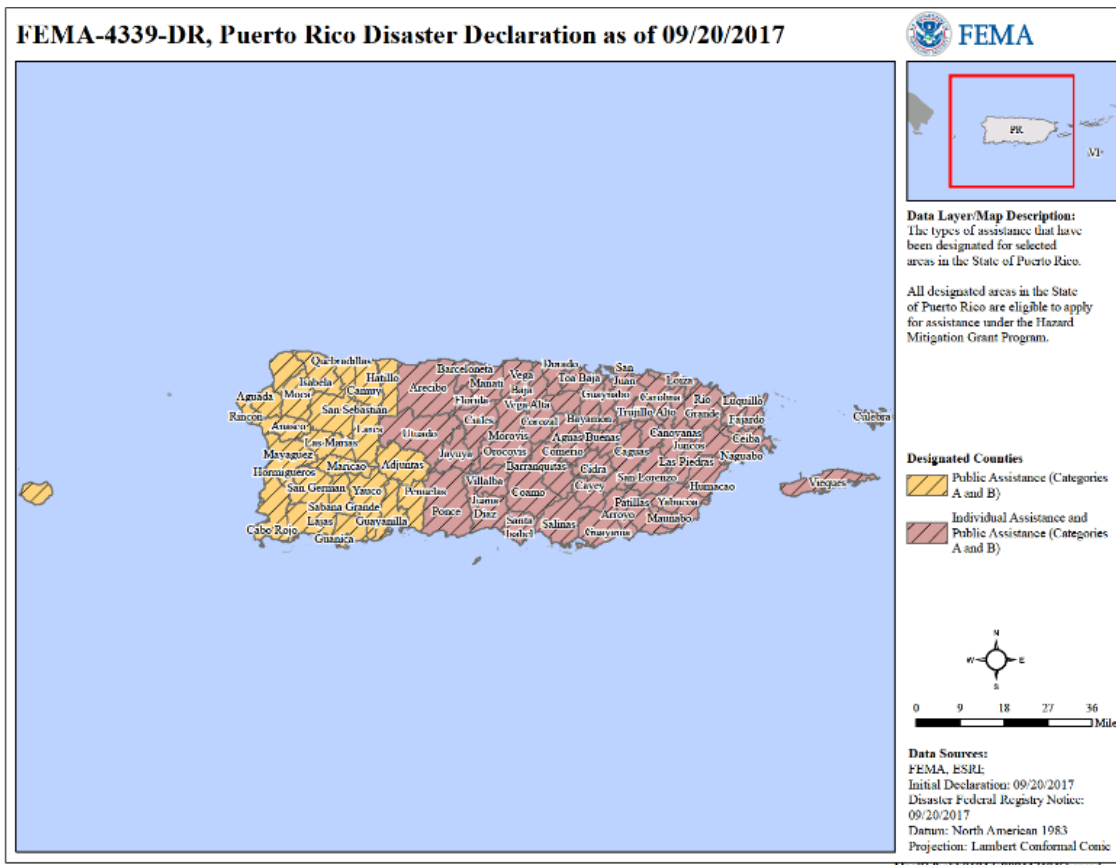
DECLARATIONS FOR HURRICANE MARIA

Puerto Rico.

Emergency Declaration. The President has signed Emergency Declaration FEMA-3391-EM for Puerto Rico.

On 9/20, The President has signed a Disaster Declaration FEMA-4339-DR for Puerto Rico.

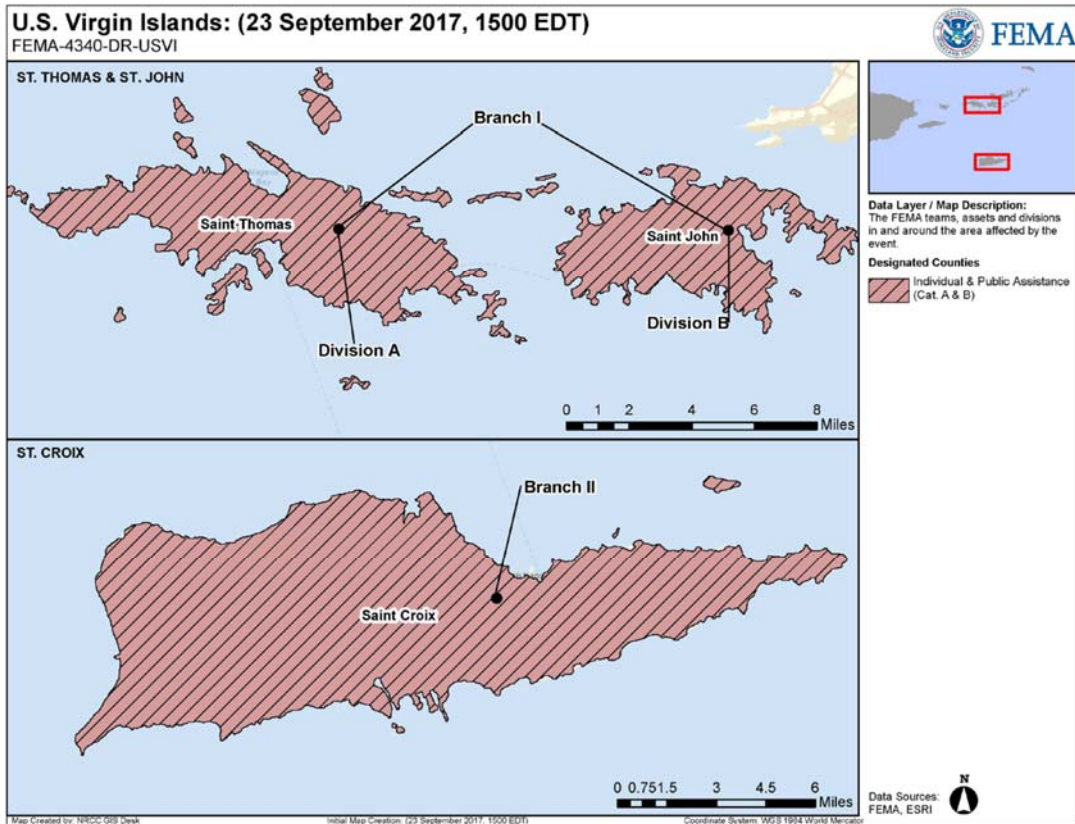
The White House initial statement covers 54 municipalities. The municipalities included in the disaster declaration are: Aguas Buenas, Aibonito, Arecibo, Arroyo, Barceloneta, Barranquitas, Bayamón, Caguas, Canóvanas, Carolina, Cataño, Cayey, Ceiba, Ciales, Cidra, Coamo, Comerio, Corozal, Culebra, Dorado, Fajardo, Florida, Guayama, Guaynabo, Gurabo, Humacao, Jayuya, Juana Díaz, Juncos, Las Piedras, Loíza, Luquillo, Manati, Maunabo, Morovis, Naguabo, Naranjito, Orocovis, Patillas, Ponce, Rio Grande, Salinas, San Juan, San Lorenzo, Santa Isabel, Toa Baja, Toa Alta, Trujillo Alto, Utuado, Vega Alta, Vega Baja, Vieques, Villalba, Yabucoa.



U.S. Virgin Islands.

Emergency Declaration. The President has signed Emergency Declaration FEMA-3390-EM for the Territory of the U.S. Virgin Islands for Hurricane Maria.

On 9/20, The President has signed a Disaster Declaration FEMA-4340-DR for the Territory of the U.S. Virgin Islands for Hurricane Maria.



FUNDING FOR IRMA AND MARIA

| Mission Assignment Number | Purpose | Start Date | End Date | Total Amount | Indirect Costs | Amt. Available | Daily Burn Rate | Used | Balance |
|---------------------------|---|------------|----------|--------------|----------------|----------------|-----------------|-------------|-----------|
| 4335DR-VI-EPA-01 (X06) | EPA to FEMA R2 RRCC (Colts Neck, NJ) and FEMA NRCC (Washington, DC) | 09/07/17 | 10/07/17 | \$100,000 | \$10,466 | \$89,534 | \$2,700 | \$51,860 | \$37,674 |
| 4335DR-VI-EPA-06 (X12) | EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA & NRA Teams and other coordination venues | 09/02/17 | 10/14/17 | \$2,000,000 | \$209,329 | \$1,790,671 | \$50,000 | \$1,416,277 | \$374,394 |
| 4336DR-PR-EPA-01 (X10) | EPA to FEMA RRCC. Funding for EPA command centers is authorized. | 09/10/17 | 10/10/17 | \$125,000 | \$13,082 | \$111,918 | \$0 | \$86,787 | \$25,131 |
| 4336DR-PR-EPA-02 (X15) | Assess oil & hazmat releases, contaminated debris & other environmental events in PR | 09/09/17 | 10/31/17 | \$1,008,000 | \$105,502 | \$902,498 | \$20,000 | \$701,111 | \$201,387 |
| 4335DR-VI-EPA-02 (X07) | Assess oil & hazmat releases, contaminated debris & other environmental | 09/07/17 | 10/31/17 | \$1,008,000 | \$105,502 | \$902,498 | \$15,000 | \$801,822 | \$100,676 |

| | | | | | | | | | |
|-----------------------------|---|-----------|------------|--------------|-------------|--------------|----------|-------------|--------------|
| | events in VI | | | | | | | | |
| 4335DR-VI-EPA-04 (X11) | Removal, cleanup and disposal of oil & hazmat; collect and dispose of HHW; monitor immediate threats to public H&S and the environment in the VI | 09/13/17 | 10/13/17 | \$10,000,000 | \$1,046,646 | \$8,953,354 | \$40,000 | \$535,341 | \$8,418,013 |
| 4339DR-PR-EPA-03 (X16) | Removal, cleanup and disposal of oil & hazmat; collect and dispose of HHW; monitor immediate threats to public H&S and the environment in PR | 09/28/17 | 10/30/17 | \$10,000,000 | \$1,046,646 | \$8,953,354 | \$40,000 | \$315,601 | \$8,637,753 |
| 4339DR-PR-EPA-04 (X17) | Coordinate/Execute all necessary assessments, evaluations, sampling and analytical services/support to ensure the safety and quality of drinking water & wastewater | 9/30/2017 | 12/31/2017 | \$6,000,000 | \$627,988 | \$5,372,012 | \$15,000 | \$61,253 | \$5,310,759 |
| 4339DR-PR-EPA-01 (X18) | EPA to FEMA NRCC or PR JFO/EOC | 9/23/17 | 10/23/17 | \$303,000 | \$31,712 | \$271,288 | \$5,000 | \$70,839 | \$200,449 |
| 4340DR-VI-EPA-01 (X19) | EPA to FEMA NRCC or USVI JFO/EOC | 9/23/17 | 10/23/17 | \$130,000 | \$13,606 | \$116,394 | \$0 | \$0 | \$116,394 |
| 4340DR-VI-EPA-04 (X20) | EPA to RRCC, JFO, EPA REOC, State EOC and other coordination venues to support FEMA response operations in the USVI | 9/17/17 | 11/30/17 | \$2,100,000 | \$219,795 | \$1,880,205 | \$0 | \$0 | \$1,880,205 |
| VI-17090102-EPA-01 (X03) | EPA to FEMA R2 RRCC (Colts Neck, NJ) | 09/02/17 | 09/11/17 | \$10,000 | \$1,046 | \$8,954 | \$0 | \$8,954 | \$0 |
| PR-17090102-EPA-01 (X05) | EPA to FEMA R2 RRC and other coordination venues as necessary | 09/01/17 | 09/11/17 | \$20,000 | \$2,093 | \$17,907 | \$0 | \$17,907 | \$0 |
| 3384EM-PR-EPA-01 (X04) | EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA and NRA Teams and other coordination venues | 09/06/17 | 09/16/17 | \$75,000 | \$7,850 | \$67,150 | \$0 | \$64,800 | \$2,350 |
| Grand Total | | | | | | \$29,437,737 | N/A | \$4,132,553 | \$25,305,184 |

FUEL WAIVERS, ORDERS, AND NO ACTION ASSURANCES

- On 9/26 EPA approved a request from PR for an emergency fuel waiver to minimize disruptions of the supply of diesel fuel for mobile nonroad generators and pumps used for emergency purposes. EPA renewed the waiver on 10/11. It now expires on 10/30/17. The waiver allows parties in Puerto Rico to sell, distribute and use heating oil and marine fuel designated for use in Emission Control Areas (ECA marine fuel) that exceed the 15 parts per million (ppm) sulfur standard if the fuel meets certain conditions. EPA and DOE are actively monitoring the fuel supply situation.
- On 9/27 EPA HQ issued an amended No Action Assurance (NAA) concerning the importation, sale, donation or distribution of mobile power generators in Puerto Rico to increase the number of generators available for use during the recovery from the devastation of Hurricane Maria. The NAA supersedes one issued by EPA on 9/22 and covers two categories of mobile power generators. The NAA allows the import and sale of mobile power generators that, while not otherwise legal for import and sale in PR, satisfy air pollution emissions standards that are similar to current EPA standards; and also allows for the import and use of other mobile power generators that do not meet standards similar to current EPA standards, but only if, among other things, they are removed from service and not operated whatsoever in Puerto Rico after 3/31/18.
- On 9/27 EPA HQ issued an essentially identical NAA concerning the importation, sale, donation or distribution of mobile power generators in the U.S. Virgin Islands.
- On 9/29 EPA Region 2 approved a request from Lilly del Caribe, Inc. for a 30-day extension of the 90-day limit on the accumulation of hazardous waste on-site. Such an extension is permitted under EPA's RCRA regulations where necessary "due to unforeseen, temporary, and uncontrollable circumstances." Lilly del Caribe informed EPA that because of impacts from the hurricanes, it is currently not possible to make hazardous waste shipments out of Puerto Rico.
- On 10/2 EPA HQ issued a No Action Assurance to Merck, Sharp & Dohme Corp. to enable the continued use of four emergency generators located at its Las Piedras, Puerto Rico facility. The NAA expires on October 31, 2017.
- On October 6, 2017 OECA, with Region 2 input, issued a CAA NAA to PREPA to provide the utility relief from certain permit conditions and permitting requirements, including emission limits, hours of operation limits, fuel usage restrictions, and restrictions on the shutdown or bypass of pollution control equipment for most of their electric generating units operating in Puerto Rico. The NAA will expire on Nov. 17. PREPA and EPA may meet to discuss remaining hurricane-affected compliance issues under the CAA and other statutes (including CWA, RCRA and EPCRA), and additional information gained in the intervening days.
- On October 2, EPA HQ received an inquiry from FEMA and the White House regarding the possibility of accepting a donation of water purification tablets from the UN World Food Programme for immediate distribution and use in Puerto Rico. As

these tablets are unregistered antimicrobial pesticides under FIFRA, OPP was asked to process a FIFRA § 18 emergency “crisis” exemption on an expedited basis. On October 4, Region 2 was asked to solicit the submission of a declaration of crisis and a request for the exemption from Puerto Rico. The tablets arrived in Puerto Rico on October 7, prior to the Governor’s office having had an opportunity to respond and before issuance of an exemption; FEMA took possession and agreed to hold them until such time as Puerto Rico submitted a request and an exemption issued. On October 8, the Secretary of the Puerto Rico Department of Health signed and submitted the crisis declaration and request for exemption. EPA concurred on the request “for use of NaDCC tablets to purify water in Puerto Rico under the 'crisis' provisions of FIFRA section 18” shortly thereafter. The crisis exemption is good for 15 days. No additional shipments are currently scheduled or planned.

POSSIBLE UPCOMING LEGAL ACTIONS

- EPA has also received a *force majeure* claim from PREPA regarding its compliance with certain requirements of a 1999 Clean Air Act consent decree; *force majeure* claims from PRASA, the P.R. Department of Transportation & Public Works and the P.R. Highway and Transportation Authority relating to those entities’ compliance with existing Clean Water Act consent decrees with EPA; and a *force majeure* claim from Puma Energy Caribe, LLC concerning its compliance with a RCRA consent decree. We are evaluating those *force majeure* claims and will take appropriate action. Similar *force majeure* claims will likely be submitted by other parties with whom we have entered into consent decrees in Puerto Rico, including the Municipality of San Juan and Municipality of Arecibo.

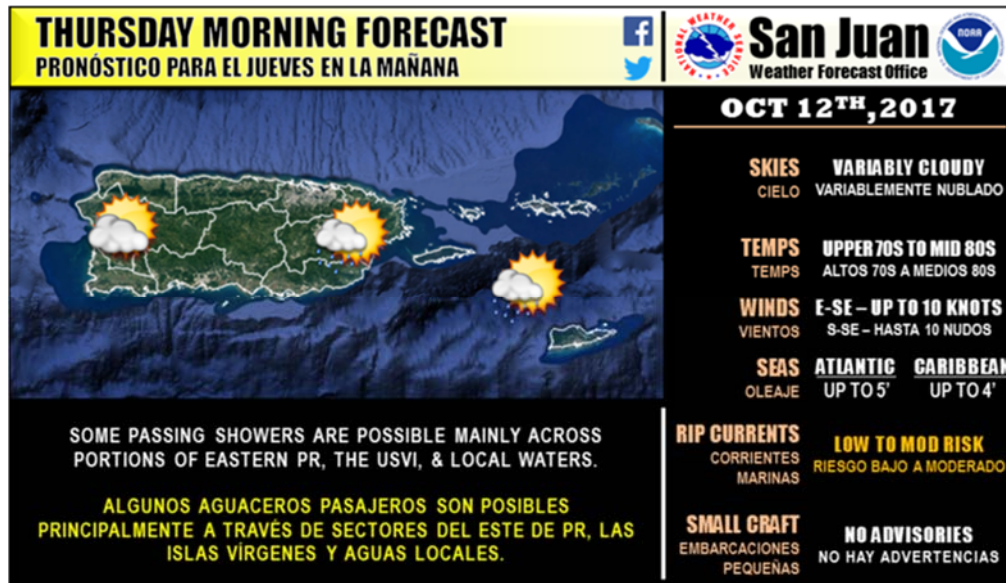
ADDITIONAL THREATS TO THE U.S. CARIBBEAN.

Current Weather.

- **Puerto Rico and the U.S. Virgin Islands.**
 - Puerto Rico. In North Central-Central Interior-Northwest-Western Interior-Mayaguez and Vicinity-Including the cities of Arecibo, Barceloneta, Dorado, Florida, Manati, Vega Alta, Vega Baja, Aibonito, Baranquitas, Ciales, Coamo, Corozal, Jayuya, Morovis, Naranjito, Orocovi, Villalba, Aguadilla, Camuy, Hatillo, Isabela, Quebradillas, Adjuntas, Lares, Las Marias, Maricao, Sabana Grande, San Sebastian, Utuado, Aguada, Anasco, Hormigueros, Mayaguez, Moca, Rincon, and San German. The Flash Flood Watch continues for a portion of Puerto Rico, including the following areas, Central Interior, Mayaguez and Vicinity, North Central, Northwest, and Western Interior.

Through 10/12, the combination of light southeast winds, local effects and diurnal heating will support scattered to numerous shower, thunderstorm development as well as significant rainfall accumulations across the northwest quadrant of Puerto Rico. Soils are already saturated and loose, and many of the rivers and small streams remain at above normal levels. Therefore, there is high

risk of river and small stream flooding as well as mudslides and rockfall in areas of steep terrain both in rural and urban areas. Urban flooding is also likely across low lying and poor drainage areas. Any additional rainfall across these areas can lead to flash flooding.



- **U.S. Virgin Islands.** St. Thomas St. John adjacent Islands-St Croix- Nearshore Atlantic and adjacent Caribbean Coastal Waters-This Hazardous Weather Outlook is for the U.S. Virgin Islands and the adjacent coastal waters. On 10/12 Rip Currents...There is a moderate risk of rip currents for eastern beaches of St. Croix.

On 10/13 through 10/18 thunderstorm coverage is expected to be lower 10/13-10/14, however, thunderstorms cannot be ruled out across the high terrain. Another tropical wave is forecast to move through the region beginning 10/15, enhancing the opportunities for more showers and thunderstorms.

FUTURE WEATHER OUTLOOK.

- No weather systems of interest to the U.S. Caribbean for the next 48 hours.
- For the North Atlantic...Caribbean Sea and the Gulf of Mexico:
 - The National Hurricane Center is issuing advisories on Tropical Storm Ophelia, located over the eastern Atlantic Ocean several hundred miles southwest of the Azores. Tropical cyclone formation is not expected from 10/12 to 10/17.

